

**FY 2000 Subsistence Fisheries Project Narrative  
Project #31**

**Project Title:** Sockeye Salmon Escapement Estimation for the Alagnak River Drainage

**Investigator Organizations:** Bristol Bay Native Association, ADF&G Commercial Fisheries Division, Katmai National Preserve

**Geographic Area:** Bristol Bay

**Information Type:** Stock status and trends

**Issue Addressed:** Inadequate in-season information to ensure subsistence opportunity on federal land. The Alaska Department of Fish and Game (ADFG) counted the escapement of salmon into the Alagnak drainage during the early 1970's, but cut the program as part of overall funding cuts in 1977. This study will provide the National Park Service (NPS), ADFG, and BBNA with data necessary to ensure that subsistence fishery management provides for subsistence harvest on federal land in the Alagnak River corridor.

**Study Objectives:**

1. To estimate the escapement of sockeye salmon for two years in the Alagnak River through the operation of a counting tower.

**Project Description:** Escapement counts throughout the Bristol Bay region are performed by ADFG. Where the escapement at any one time primarily reflects a single species, tower counts are preferred due to their low cost and feasibility. The Alagnak River salmon escapement consists primarily of sockeye, chinook, and coho salmon. There is some overlap in return timing, but not enough to warrant more intensive counting methodologies. The contribution of the Alagnak system to the Bristol Bay commercial fishery is usually lower than the contributions of the Kvichak and Naknek systems, but is sometimes quite significant. Without escapement counts to monitor the passage of fish up into the federal boundary, there is no way to ensure that subsistence needs are met in a fishery zone primarily managed for Naknek and Kvichak escapements.

This project will fund ADFG for management oversight, equipment, supplies, training, and data distribution, and BBNA to staff the counting tower. The tower will be staffed by four seasonal employees, including one crew leader. Park Service involvement will be primarily in coordination and assistance with site selection and permitting processes. Counts are taken of fish passage for 20 minutes of each hour throughout the 24 hours of each day. Night counts are facilitated by shining a focused light beam into the water to illuminate passing fish. White plasticene panels on the river bottom make fish more readily visible for counts during both day and night. Age and length distribution data will be collected from salmon seined as they migrate up the river.

**Consultation Completed/Potential for Capacity Building:** This proposal is jointly sponsored by NPS, BBNA, and ADFG. The Village of Levelock, a member of BBNA, is the primary source of subsistence use of the Alagnak River. This project will facilitate interagency cooperation, and provide each partner with data necessary to successfully manage their programs. It will also provide an opportunity to test the feasibility of this partnership arrangement before making long-term commitments to collection of this data.

**Deliverables/Products:** Alagnak escapement counts will be incorporated into the annual management reports of ADFG and will be widely available. There will be data collected to ensure provision of adequate subsistence harvest opportunities for subsistence users on the federal land within the Alagnak River corridor.

**Cost:** The table below shows the detailed funding request. Yearly funding requested to BBNA totals \$65,000, while funding requested for ADFG is \$78,500 in the first year and \$46,500 in subsequent years.

Annual Budget Summary	BBNA	ADF&G	Total
FY 2000	\$65.0 K	\$78.5 K	\$143.5 K
FY 2001	\$65.0 K	\$46.5 K	\$111.5 K
Total	\$130.0 K	\$125.0 K	\$255.0 K